

Fort Bragg Energy Program

Fort Bragg



Home of the Airborne & Special Operations

Agenda

- Overview of Fort Bragg
- Mandates
- Net Zero Energy Initiative
- Potential projects (technologies, cost, jobs)
- Barriers
- Federal Law
- Why is Third Party Electric Sales in NC important
- Questions



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FORT BRAGG - "More Than A City"

Size: 256 Square Miles (160,832 Acres)

- **Supported Population: 273,428**
 - Active Duty: 53,540
 - Family Members (Active): 75,629
 - Retirees including Family: 99,779
 - Civilian & Contract Employee: 19,606
- **Buildings: 48M SF**
- **Shopping Centers: 11**
- **Restaurants: 12**
- **Fast Food outlets: 37**
- **Dining facilities: 17**
- **Railroad Lines: 19 miles**
- **Roads and Utilities**
 - 1550 Lane Miles Paved Roads
 - Utilities: Water, Waste Water, Electricity, Natural Gas
- **Simmons Army Airfield: 579 Acres**
- **Camp MacKall: 7,917 Acres**
- **Museums: 4**
- **Hospital: 1**
 - Medical Clinics: 15
 - Dental Clinics: 6



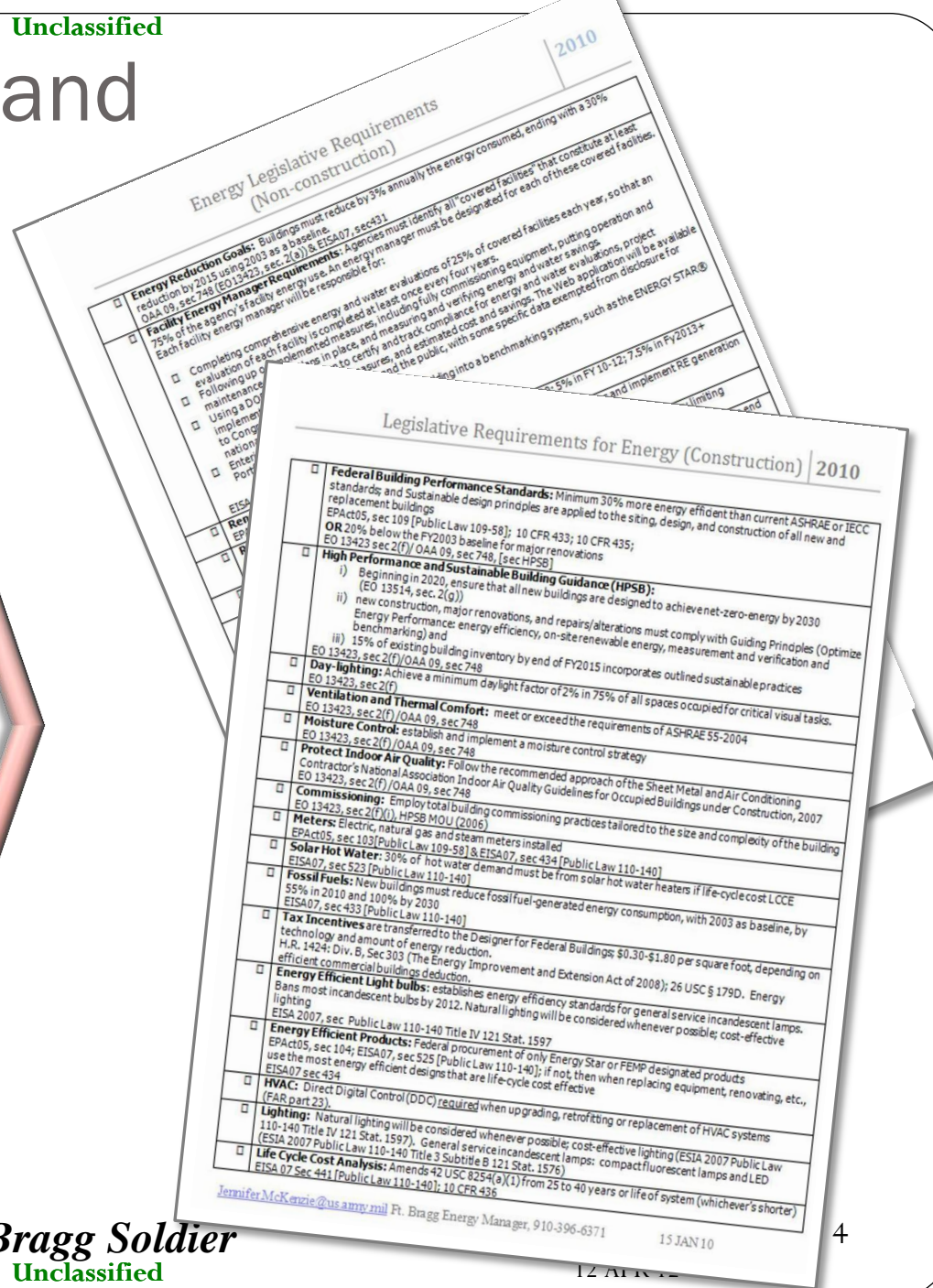
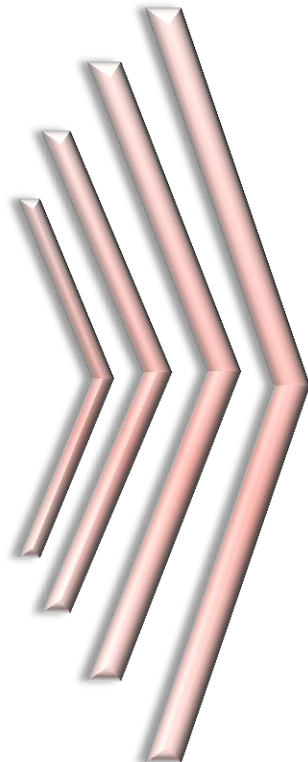
- **Schools**
 - Elementary: 7
 - Primary: 2
 - Intermediate: 1
 - Middle: 2
- **Army Family Housing**
 - 6,238 On-Post (as of Feb 12)
 - 250 Off-Post
 - End State FY16: 6,704 On-Post
- **Churches: 11**
- **Consolidated Library: 1**
- **Child Care Centers: 8**
- **Recreational Facilities: 242**



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Energy Laws and Policies

- EPACT 05
- EISA 07
- NDAA 10
- EO 13423
- EO 13514
- NZEI



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Net Zero Energy Definition

A Net Zero Energy Installation (NZEI) is an installation that produces as much renewable energy on site as it uses, over the course of a year. To achieve this goal installations must first implement aggressive conservation and efficiency efforts while benchmarking energy consumption to identify further opportunities.

Net Zero Hierarchy



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Net Zero Energy Installation



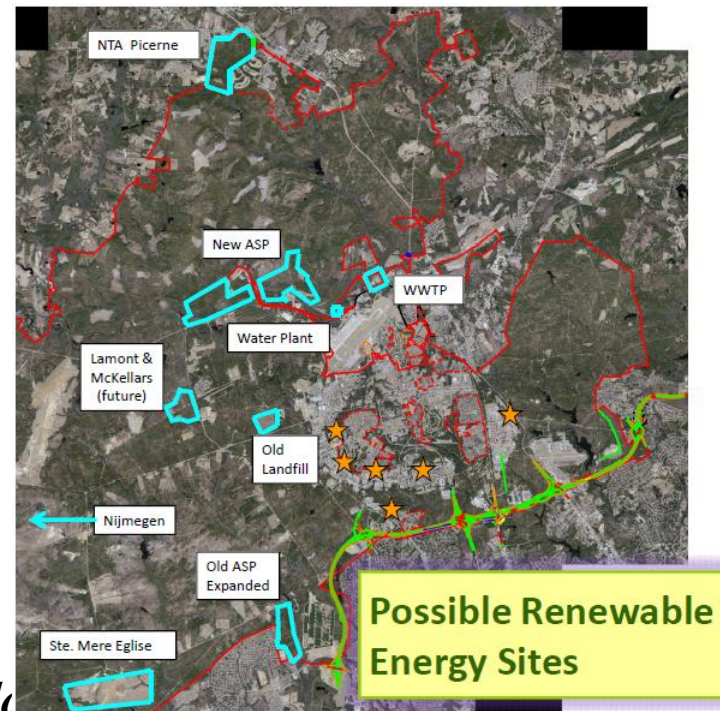
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Voltaics

Hydro



\$950M Opportunity

Combined Heat & Power



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Local Job Potential

Project	Full time	Temporary (construction)
PV	5	100
Hydro	5	30
Biomass Electric	180	250
CHP	15	150
GSHP	5	40
SDHW	10	40
Total	235	610



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Barriers

- NC Restrictions on third-party partnerships
- Air quality regulations
- Net Metering Laws
- Utility tariffs
- Value of RECs
- Value of System Benefits



Federal Law

- 40 USC 591

Generally requires federal agencies to follow state law when purchasing electricity

- 10 USC 2922a

Exception under 591 that allows **Military** to enter into 3rd party contracts to purchase renewable energy

Link to SE Clean Energy Application Center's whitepaper on 3rd Party Sales:

http://southeastcleanenergy.org/resources/reports/SERAC_3rd_Party_PPA_Whitepaper_%20110518.pdf



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Why 3rd Party Sales Legislation is important to Fort Bragg

- Remove uncertainty for 3rd party providers
- Fort Bragg wants to be a good neighbor



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Questions

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